



## TOWN COUNCIL – AGENDA REQUEST FORM

THIS FORM WILL BECOME PART OF THE BACKGROUND INFORMATION USED BY THE COUNCIL AND PUBLIC

Please submit Agenda Request Form, **including back up information, 8 days prior** to the requested meeting date. **Public Hearing requests must be submitted 20 days prior to requested meeting date to meet publication deadlines** (exceptions may be authorized by the Town Manager, Chairman/Vice Chair).

### MEETING INFORMATION

Date Submitted: September 20, 2016

Date of Meeting: September 22, 2016

Submitted by: Town Council Chairman Nancy

Harrington and Vice Chair Finlay Rothhaus

Department:

Time Required: 15 minutes

Speakers:

Background Info.

Supplied:

Yes: ☒ No: ☐

### CATEGORY OF BUSINESS (PLEASE PLACE AN "X" IN THE APPROPRIATE BOX)

Appointment:

☐

Recognition/Resignation/

Retirement:

☐

**Public Hearing:**

☐

Old Business:

☐

New Business:

☒

Consent Agenda:

☐

Nonpublic:

☐

Other:

☐

### TITLE OF ITEM

Drought Press Release

### DESCRIPTION OF ITEM

Town Council to consider proposed press release related to further water restrictions.

### REFERENCE (IF KNOWN)

RSA:

Warrant Article:

Charter Article:

Town Meeting:

Other:

N/A

### EQUIPMENT REQUIRED (PLEASE PLACE AN "X" IN THE APPROPRIATE BOX)

Projector:

☐

Grant Requirements:

☐

Easel:

☐

Joint Meeting:

☐

Special Seating:

☐

Other:

☐

Laptop:

☐

None:

☐

### CONTACT INFORMATION

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Phone Number

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### APPROVAL

Town Manager:

Yes ☐ No: ☐

Chair/Vice Chair:

Yes ☒ No: ☐

Hold for Meeting Date: \_\_\_\_\_

**FOR IMMEDIATE RELEASE**

**Contact: Town Manager's Office**

**Phone: 424-2331**



**Drought Press Release**

**MERRIMACK, NH – (September 23, 2016)** - On September 16<sup>th</sup>, Town of Merrimack and Merrimack Village District (MVD) personnel participated in a state-wide phone conference with state officials to discuss the drought emergency across the state. During this conference the State of New Hampshire recommended increased water conservation measures. In support of this recommendation, the Town and the MVD encourage all residents, businesses and industries to use personal water conservation measures.

In addition, the MVD will be instituting further restrictions on outside watering beginning Monday, September 26<sup>th</sup>, from twice daily to ONCE daily, 5:00-8:00pm ONLY, odd/even days. All Town properties and facilities will abide by these restrictions and recommendations.

The New Hampshire Department of Environmental Services (NHDES) has developed a link for drought information at:

<http://des.nh.gov/organization/divisions/water/dam/drought/index.htm>

Residents are also alerted that continued drought conditions may create supply shortage concerns for winter water availability, especially for users of private wells. The Town of Merrimack and the MVD are strongly encouraging all private well owners to also limit their external watering uses. Private well owners need to be aware that if the drought continues, their well levels may be limited and may create a concern as the winter progresses. We also strongly encourage all businesses and industries to establish water conservation efforts in order to assist the community in meeting their water needs through the winter.

This notice, as well as the NHDES “Drought Emergency in New Hampshire Recommended Measures for New Hampshire Residents” and “2016 Drought Guidance for Homeowners on Private Wells” documents will be placed on the Town of Merrimack (<http://www.merrimacknh.gov>) and Merrimack Village District (<http://www.mvdwater.org>) websites. Updates will be posted as they become available.

**-END-**

# **TITLE III**

## **TOWNS, CITIES, VILLAGE DISTRICTS, AND UNINCORPORATED PLACES**

### **CHAPTER 41**

#### **CHOICE AND DUTIES OF TOWN OFFICERS**

##### **Selectmen**

##### **Section 41:11-d**

###### **41:11-d Restricting the Watering of Lawns. –**

I. The local governing body may establish regulations restricting the use of water from private wells or public water systems for residential outdoor lawn watering when administrative agencies of the state or federal government have designated the region as being under a declared state or condition of drought.

II. The local governing body shall give notice prior to the implementation of the regulations in paragraph I. Notice shall be given at least 3 calendar days before the regulations are implemented. The notice required under this section shall not include the day notice is posted. Notice of the regulations shall be published in a paper of general circulation in the municipality and shall be posted in at least 2 public places.

III. The full text of the proposed regulations need not be included in the notice if an adequate statement describing the proposal and designating the place where the proposal is on file for public inspection is stated in the notice.

**Source.** 2007, 218:1, eff. Aug. 24, 2007.



## **Drought Emergency in New Hampshire Recommended Measures for New Hampshire Residents**

Southern New Hampshire is experiencing a drought emergency. Southern New Hampshire has received about 50% of its normal rainfall over the last six months. Streamflow and groundwater levels are at historic low levels. Some New Hampshire residents on private wells, as well as some community water systems are experiencing water supply shortages. More widespread shortages are imminent if rainfall does not replenish our lakes, streams and groundwater supplies before winter weather sets in, as our water resources will probably not be substantially refilled until after the snowmelt during the spring of 2017. The drought condition is a very slow-moving natural disaster that may continue to worsen.

**All New Hampshire residents and businesses are asked to reduce water use and be prepared for the effects of drought.**

### **Reducing Water Use Immediately – Recommendations for New Hampshire Residents:**

Average water use per capita in New Hampshire is approximately 63 gallons per day for indoor use. In the summer, total water use increases to 93 gallons per capita per day due to outdoor water use, mostly attributed to lawn watering. Take the below actions to protect water supplies and to save your family water, energy, and money.

**Lawn Watering** – Discontinue lawn watering immediately. Lawn watering can cause household water use to more than double and needs to be discontinued now to save our state's water supply for the winter months.

**Sink Faucets** – Whether you are brushing your teeth, washing your hands, or washing dishes, turn off the faucet to save 2.5 gallons per minute (gpm). For further savings, replace bathroom sink aerators with a 1.5 gpm aerator.

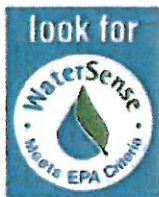
**Showerheads** - Reduce shower time to save anywhere from 2.5 gpm to 5 gpm. Look closely at your showerhead for the labeled flow rate (gpm) and consider replacing it with a WaterSense certified showerhead that guarantees performance at 2.0 gpm or less.

**Clothes Washers** – Wash only full loads and replace clothes washers that are more than 10 years old with new Energy Star certified washers to reduce water use from 23 gallons per load to 13 gallons per load and to cut energy use by 25%. For more information, go to <https://www.energystar.gov/>. NHsaves.com offers a \$30 rebate for energy efficient washing machines. Rebate forms are also often available with the retailer.

**Toilets** – Fix running toilets to eliminate hundreds of gallons a day of wasted water. To test your toilet for a leak, place 5 drops of food coloring in the water tank of the toilet and wait 15 minutes to see if the color appears in the toilet bowl. If so, a common cause is the toilet flapper, which can be replaced with little effort or cost.

Toilets older than 1994 may use anywhere from 3.5 gallons per flush (gpf) to 7 gpf. Replace older toilets with WaterSense certified toilets (1.28 gpf) to save hundreds of gallons a week.

\*WaterSense certified showerheads, toilets, and sink aerators have been tested for performance and are guaranteed to use 20% less water than today's standard products. Look for the WaterSense label on the packaging at your local home improvement retailer or in the product information online. For more information about the products, go to <https://www3.epa.gov/watersense/> and click on 'Products.'



### **Recommendations for Households on Private Wells:**

All wells are susceptible to the impacts of drought, and households with private wells that fail may incur substantial expenses to improve or replace their well. Be prepared.

**Manage Your Water Use** - Spread out the timing of water use so that multiple water uses do not co-occur and so the well has time to replenish.

**Address Water Supply Problems Before Winter** - If your water supply is currently becoming dewatered, now is the time to address the deficiencies. Deferring work to winter months is risky because completing the work may not be possible and/or could be more costly in the winter months.

**Financial Preparedness** - Households should identify savings or other financing options for addressing failed water supply wells.

**Well Location and Basic Information** – Maintain records showing the exact location of the well and/or maintain a well location marker that can be identified during all seasons. Maintain records regarding your well construction and pump work.

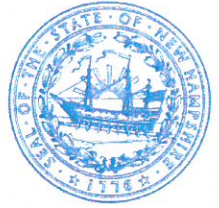
Detailed drought guidance for households on private wells can be found at <http://des.nh.gov/organization/divisions/water/dam/drought/documents/droughtguidehome.pdf>.





The State of New Hampshire  
**DEPARTMENT OF ENVIRONMENTAL SERVICES**

Thomas S. Burack, Commissioner



### **2016 Drought Guidance for Homeowners on Private Wells**

Abnormally dry to extreme drought conditions have persisted through the majority of the summer, leading to the failing of some private wells. To prevent further water shortages, the New Hampshire Department of Environmental Services (NHDES) is advising water be reserved for only indoor uses and that wise indoor use be practiced per the actions below. Also, be aware that municipalities have the authority to restrict residential lawn watering for public and private well users to protect the resource for the whole.

Current drought information may be found at the NH Drought Management Program webpage: <http://des.nh.gov/organization/divisions/water/dam/drought/index.htm>. To determine the severity of drought in your town, under "Hot Topics" click on "U.S. Drought Monitor and U.S. Drought Outlook" and zoom into the "U.S. Drought Monitor".

#### **CONSERVE WATER**

To prevent your well from failing or if your well cannot keep up with demand, below are personal actions you can take that may help mitigate the problem until precipitation replenishes your well:

- Spread out the timing of water use so that multiple water uses do not co-occur and so the well has time to replenish.
- Cut-out non-essential uses such as outdoor water use for lawn watering and car washing. This can reduce water use by 25% to 50%.
- Conserve water by cutting back on shower times, only doing full loads of laundry when necessary, and turning off the faucet while brushing teeth, doing dishes, and washing hands.
- Top-loading washing machines built before 2003 and toilets older than 1994 are known to be the largest water-wasting culprits in the home. Showerheads older than 1994 can also waste a great deal of water, as can older bathroom sink aerators. For the greatest savings and guaranteed performance, replace old washing machines with ENERGY STAR® certified machines and replace old water fixtures with EPA WaterSense certified fixtures. For more details, see the water efficiency fact sheets at the NHDES Water Conservation Program webpage:  
[http://des.nh.gov/organization/divisions/water/dwgb/water\\_conservation/index.htm](http://des.nh.gov/organization/divisions/water/dwgb/water_conservation/index.htm)

#### **SYMPTOMS OF WELL FAILURE**

Typically, dug wells, shallow bedrock wells, wells located near topographic high points and wells constructed in areas where bedrock is close to the ground surface are more susceptible to

failing when drought conditions are present. The typical homeowner does not have a means of determining a well's water level, although symptoms of well failure may be obvious. Symptoms may include:

- No water.
- Sudden drops in water pressure or pressure surges.
- Air bubbles coming out of non-aerated faucets.
- Cloudy or heavily silted water.

The cause of well failure may be a shortage of water or other problems associated with the well casing, valves, waterlines, pumps, or pressure tanks. It is important to work with a licensed pump installer and/or well driller to diagnose the problem and determine the appropriate corrective action to take.

If you are experiencing any of the above issues in your water system, address them immediately as completing the work in the winter may not be possible and/or could be more costly.

## **PRIVATE WELL INFORMATION**

Maintain records regarding well construction and pump work, as well as records showing the exact location of the well and/or maintain a well location marker that can be identified during all seasons.

Since 1984, well drillers have been required to fill out and submit a well completion report for each well they construct. Records for wells may be found by clicking on the OneStop button at [www.des.nh.gov](http://www.des.nh.gov) and querying water well information or by contacting the NHDES Drinking Water and Groundwater Bureau. Records of wells constructed prior to 1984 may be available from the original well driller or pump contractors that previously provided maintenance on the well pump, who may know the depth of the well and pump. This information should be used by the licensed well driller or pump installer you work with.

## **WELL DEFINITIONS**

**Dug wells** are commonly 3 or 4 foot diameter wells constructed by excavation and are usually not much deeper than 15 feet below land surface. Older dug wells are lined with fieldstone, and more recent construction utilizes inter-locking concrete tile. These wells are generally easy to identify in your yard because they are relatively large stone or concrete objects protruding from the ground and many have well houses built over them for protection or ornamental purposes.

**Drilled bedrock wells** are almost always 6 inch diameter wells drilled into solid bedrock and cased with steel pipe through the unconsolidated earth deposits into the upper surface of the bedrock. The remainder of the well is a 6 inch open hole drilled in bedrock. These wells range in depth from less than 100 feet to more than 1,000 feet. They should be easily identified as that odd looking 6 inch steel pipe sticking out of the ground.



## WELL IMPROVEMENT OPTIONS

A licensed well driller or licensed pump installer will be able to assist you with determining if your water supply is diminishing, troubleshooting other well issues, and recommending actions to help remedy the problem. To search for a licensed well water contractor, go to:

[http://www2.des.state.nh.us/OneStop/Water\\_Well\\_Contractors\\_Query.aspx](http://www2.des.state.nh.us/OneStop/Water_Well_Contractors_Query.aspx)

In New Hampshire, most residents on private wells have a dug well or a bedrock well. If your well is failing due to lack of supply, below are options which may help to mitigate the issue and factors you should discuss with a licensed well driller or licensed pump installer.

- Lowering the pump or pump intake into the bedrock or dug well to access more usable storage. As lowering the pump means the pump will have to work harder, a larger pump may be necessary. There are also potential water quality issues that could occur as a result of lowering the pump.
- Increase the atmospheric tank size to provide additional water storage. For a well with a slow recovery rate, the additional storage will reduce demands on the well during high water use periods and store water extracted from the well during lower use periods.
- Deepen the existing well to increase the yield of the well and/or to lower the pump to increase usable storage in the borehole. The yield of a bedrock well will only increase if new water bearing fractures are encountered. A dug well can only be deepened if it is not underlain by bedrock. Driving a steel metal rod into the bottom of a dug well is a common test to determine if bedrock is present.
- Construct a new well to be used in tandem with or replace an existing water source. It is advisable to check the well database on OneStop with respect to the depths and yields of other wells in the area, to determine if there is good chance of a new well supplying the yield needed.
- Purchase water tanks which may be filled by a bulk water hauler. A list of bulk water haulers may be found at <http://des.nh.gov/organization/divisions/water/dwgb/wseps/documents/bulk-haulers-providers.pdf>.
- Hydro-fracture the existing bedrock well to increase yield by flushing out and opening fractures in surrounding rock to increase water flow. Factors to discuss with a licensed well driller/pump installer include:
  - If the well was previously developed by hydro-fracturing and the yield has again diminished, a second attempt to hydro-fracture may be initially successful, but it will likely not be sustained over time.



- It is recommended that shallow bedrock wells be deepened to 400 or 500 feet to obtain additional supply prior to considering hydro-fracturing. This provides adequate surface area in the well borehole to develop deeper and more sustainable water-bearing fractures, providing a good chance of increasing yield.
- A completely dry hole is not a great candidate for hydro-fracturing because the well must have some water-bearing fractures to start with.

## **SAFETY & SANITATION**

All wells should be disinfected after completing any of the above work. See the fact sheet WD-DWGB-4-11 Disinfecting a Private Well at:

<http://des.nh.gov/organization/commissioner/pip/factsheets/dwgb/documents/dwgb-4-11.pdf>.

Do not share water between homes by interconnecting two homes' plumbing systems. This is a contamination risk. Backflows may spread bacteria from one home to the other home.

If using water from a neighbor's home, do not use water from a hose for drinking or cooking, as the hose may have bacteria in it, as well as other contaminants. Hose water may be used for bathing, washing clothes, cleaning, and flushing toilet.

Do not fill wells with water delivery by a tanker truck. This is a violation of Underground Injection Control regulations, is usually ineffective in providing a sustained water supply, and could damage the well and contaminate groundwater not only in the well being filled but also other nearby wells.

You do not need running water to flush a toilet. Use a hose or a bucket of water and dump approximately 1 gallon of water into the toilet bowl all at once and gravity will flush the toilet.

## **FINANCING**

There is limited financial assistance available explicitly to assist with mitigating a problem with a private water system. Households should identify savings or other financing options for addressing failed water supply wells. Below is one financial assistance option for very low income households:

- The US Department of Agriculture (USDA) Rural Development Home Repair Loan/Grant Application Section 504 provides private well financial assistance to people who live in rural communities (population less than 20,000) and make less than fifty percent of the median household income in the area. In some instances, grants are available to people that are over the age of sixty-two. For more information go to:  
<http://des.nh.gov/organization/divisions/water/dam/drought/documents/wellfinancialassist.pdf>

The Concord Office of the USDA can be contacted by telephone at (603) 223-6035 for more information regarding the availability of funds to assist with water supply shortages in a privately owned water supply.

**FOR MORE INFORMATION**

For additional information, please contact the Drinking Water and Groundwater Bureau at (603) 271-2513 or [dwgbinfo@des.nh.gov](mailto:dwgbinfo@des.nh.gov) or visit [www.des.nh.gov](http://www.des.nh.gov), click on the "A-Z List", then click "Drinking Water and Groundwater Bureau". All of the Bureau's fact sheets are on-line at <http://des.nh.gov/organization/-commissioner/pip/factsheets/dwgb/index.htm>.